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(54) **UNDERWATER HIGH SPEED PROJECTILE SPEED SENSING DEVICE**

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This patent is subject to a terminal disclaimer.

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(52) **U.S. Cl.** **324/178; 73/167**
(58) **Field of Search** 324/178, 179, 324/180; 73/167

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(57) **ABSTRACT**

A device for sensing projectile velocity in an underwater environment is provided. The device includes a plurality of evenly spaced break screen members positioned in a path of the projectile. Each break screen member includes a support member, a pair of transparent sheets spanning the support member, a continuous resistive trace sandwiched between the transparent sheets, and a sensing member correspondingly connected to each resistive trace. The sensing member includes means for outputting a signal responsive to impact of the projectile against the break screen, and a logic arrangement for determining a difference between impact of at two adjacent break screens throughout the run of break screens, thereby determining a velocity of the projectile.

9 Claims, 2 Drawing Sheets